

Classified  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO COMMERCIAL

Report Number: P580617

Luminaire Tested: **HCC4S40D010BZ-HM43040927-41MDH**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P580617  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-5)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4S40D010BZ-HM43040927-41MDH  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

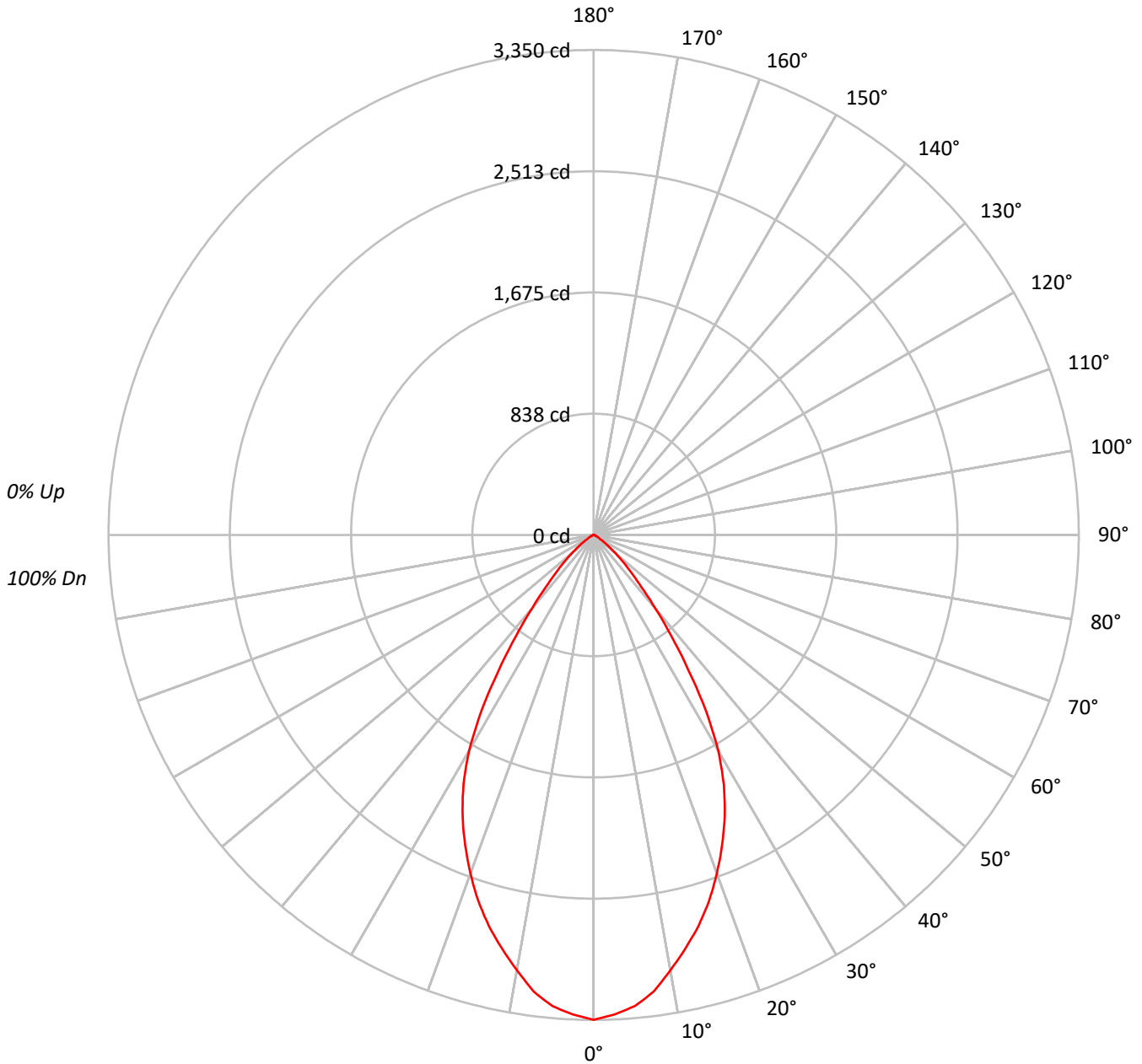
Lumens per Lamp: N/A  
Luminaire Lumens: 3191.5 lumens  
Efficiency: N/A  
Efficacy: 77.8 lumens/watt  
Spacing Criteria (0/90/45): 0.9 / 0.9 / 0.91  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 41  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P580617  
CATALOG NUMBER: HCC4S40D010BZ-HM43040927-41MDH

### Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab  
 1121 Highway 74 South  
 Peachtree City, GA 30269



TEST NUMBER: P580617

CATALOG NUMBER: HCC4S40D010BZ-HM43040927-41MDH

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93	93	93	93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86	86	86	86
3	101	95	89	85	99	93	88	84	91	86	83	88	85	82	86	83	81	79	79	79	79
4	96	88	82	78	94	87	81	77	85	80	76	82	79	75	81	77	74	73	73	73	73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67	67	67	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62	62	62	62
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58	58	58	58
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54	54	54	54
9	73	63	57	53	72	63	57	53	62	56	52	61	56	52	60	55	52	51	51	51	51
10	70	59	53	49	69	59	53	49	58	53	49	57	52	49	57	52	49	47	47	47	47

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	413183
5°	404547
10°	382308
15°	357053
20°	326553
25°	291615
30°	244889
35°	172275
40°	106255
45°	63617
50°	37496
55°	18688
60°	9646
65°	6333
70°	3931
75°	3098
80°	1492
85°	2972



TEST NUMBER: P580617  
 CATALOG NUMBER: HCC4S40D010BZ-HM43040927-41MDH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	305.1	9.6
10°-20°	781.6	24.5
20°-30°	974.7	30.5
30°-40°	718.0	22.5
40°-50°	295.3	9.3
50°-60°	86.3	2.7
60°-70°	22.2	0.7
70°-80°	6.8	0.2
80°-90°	1.4	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2061.5	64.6
0°-40°	2779.5	87.1
0°-60°	3161.0	99.0
0°-90°	3191.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3191.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3350	
5°	3267	305
15°	2796	782
25°	2143	975
35°	1144	718
45°	365	295
55°	87	86
65°	22	22
75°	6	7
85°	2	1
90°	0	



TEST NUMBER: P580617  
CATALOG NUMBER: HCC4S40D010BZ-HM43040927-41MDH

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3349.8
2.5°	3315.0
5°	3267.3
7.5°	3180.4
10°	3052.4
12.5°	2926.4
15°	2796.1
17.5°	2650.7
20°	2487.8
22.5°	2318.6
25°	2142.7
27.5°	1947.3
30°	1719.4
32.5°	1443.6
35°	1144.1
37.5°	879.2
40°	659.9
42.5°	488.4
45°	364.7
47.5°	269.2
50°	195.4
52.5°	134.6
55°	86.9
57.5°	52.1
60°	39.1
62.5°	28.2
65°	21.7
67.5°	15.2
70°	10.9
72.5°	8.6
75°	6.5
77.5°	4.4
80°	2.1
82.5°	2.1
85°	2.1
87.5°	0.0
90°	0.0

Classified  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

Classified  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report





Classified  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



— 0°-180°

Classified  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Classified  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Classified  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)